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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/328,484	06/09/1999	HIDEAKI FUNAKOSHI	3064NG/47927	6889

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EXAMINER

BROWN, RUEBEN M

ART UNIT PAPER NUMBER

2611

DATE MAILED: 08/04/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/328,484

Applicant(s)

FUNAKOSHI, HIDEAKI

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 4, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-4 & 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birch, (U.S. Pat # 5,583,562), in view of Lownes, (U.S. Pat # 6,369,861).

Considering claim 7, the claimed digital broadcasting receiver comprising a transport unit for separating/dividing a demodulated digital broadcast signal reads on the operation of the demultiplexor 156 in Birch, which receives a demodulated signal from the demodulator 154, see Fig. 1 & col. 5, lines 49-51. The claimed feature of detecting one of a one-channel or mutli-channel broadcast based on a packet ID included in the digital broadcast signal is met by the receiver's detection of the HDTV flag. Birch teaches that the packet header includes a code, which identifies video services, and an additional HDTV flag is also set in order to identify a video stream as being of HDTV format, col. 8, lines 65-67; col. 11, lines 15-45; col. 22, lines 51-65; col. 23, lines 1-6 & Fig. 12B.

As for the additionally claimed feature of a sub-channel control unit that outputs a broadcast signal with a predetermined packet ID when the detected result indicates multi-channel broadcasting, the recitation reads on the disclosure of Birch, see col. 5, lines 56-61; col. 22, lines 51-67 & col. 27, lines 35-59. The broadcasting signal, including the VSDP, is received & processed (and therefore output) by the demultiplexor 156 and data processors 157, which reads on outputting 'a predetermined packet ID'. In col. 11, lines 29-45, Birch explicitly teaches this feature, "see Fig. 6a, HDTV flag output of video processor 630"; (col. 11, lines 29-45; Fig. 6a).

Regarding the additionally claimed feature of the setting unit for setting a subchannel to be initially displayed when the one-channel broadcasting is switched to the multichannel broadcasting and a recording unit for holding the subchannel set via the setting unit, such that the

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subchannel control unit controls the transport unit so that when the result detected by the broadcasting detecting unit indicates the multichannel broadcasting, then a broadcasting signal including a packet ID corresponding to the subchannel held in the recording unit is outputted, Birch does not specifically discuss such a feature. However, Lownes, which is in the same field of endeavor as Birch, i.e. of receiving & detecting SD and HD programs, discloses that when a particular program is currently selected, and the user selects a different program (within a multichannel broadcasting signal), that the program number is held in memory and displayed with the OSD; see col. 6, lines 4-50 & Fig. 4; Fig. 5).

It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Birch with the feature of holding the switched channel in memory and displaying on the TV screen, at least for the advantage of informing the viewer of the original channel/program number and the current channel/program number, as shown by Lownes.

Considering claim 8, the claimed elements of a computer software product for performing a method of controlling a digital broadcasting receiver and a computer readable medium having stored thereon program code segments that cause the digital broadcasting receiver to perform steps that correspond with subject matter mentioned above in the rejection of claim 7, is likewise treated. Furthermore, Birch discloses that the receiver 150 may be a computer, col. 6, lines 11-24) and Lownes teaches that the user equipment is controlled by a microprocessor 114, col. 3, lines 15-20; col. 3, lines 59-67 & col. 6, lines 59-67.

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As for the additional step of an OSD control unit causing an OSD to be made by superimposing data on broadcasting screen, Birch does not discuss such a feature. Nevertheless, Lownes discloses displaying the channel and program numbers on the TV screen, col. 6, lines 20-45; Fig. 4 & Fig. 5. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Birch with the known technique disclosed by Lownes, of displaying information, such as the channel or program number tuned onto a TV screen for the beneficial purpose of providing the viewer with useful tuning or status information with respect to the currently tuned TV program.

Regarding the specific feature of superimposing, Lownes does not explicitly disclose such a technique. Official Notice is taken that superimposing data on TV screen was very well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate the combination of Birch & Lownes, using superimposing or a graphical overlay, at least for the known advantage of enabling the video image to be displayed on the TV screen, simultaneously as well as the data that is being superimposed.

Regarding the additionally claimed feature of instructing the OSD control unit to make an OSD of a sub-channel corresponding to the packet ID, the claimed feature is met by Lownes, col. 6, lines 30-41.

Considering claim 3, the claimed subject matter is met by the discussion in Lownes that when a subscriber changes the sub-channel, i.e. program within a multi-channel broadcast signal,

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that the broadcasting signal, which includes the packet ID of the selected sub-channel is displayed, col. 6, lines 5-40; Fig. 4 & Fig. 5.

Considering claim 4, the claimed subject matter is broad enough to read on displaying the sub-channel within a multi-channel broadcasting signal, which reads on the disclosure of Fig. 4 of Lownes.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Choi Teaches simultaneously viewing a SDTV and an HDTV program.

B) Murakami Digital TV system that displays the channel numbers as screen overlays.

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Any response to this action should be mailed to:

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Or:

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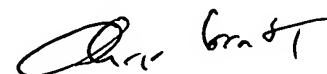
Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.

The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone numbers for the
organization where this application or proceeding is assigned is (703) 872-9314 for regular
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown



CHRIS GRANT
PRIMARY EXAMINER